



Santa Barbara County Public Works Department
Flood Control & Water Agency

May 15, 2008

Mr. Scott Couch
State Water Resources Control Board
Division of Financial Assistance
1001 I Street, 16th Floor
Sacramento, CA 95814

Re: Draft Funding Recommendations, Round 2 of Proposition 50 Implementation Grants

Dear Mr. Couch:

Santa Barbara County is pleased to submit this comment letter regarding the Proposition 50 Round 2 Integrated Regional Water Management (IRWM) draft funding recommendations. Santa Barbara County is submitting this letter on behalf of the Santa Barbara Countywide Cooperating Partners, the 29 regional water agencies that participated in the IRWM Plan and Proposition 50 IRWM Round 2 grant application.

Santa Barbara County would like to commend the State for its recent recommendation to provide \$25 million in Proposition 50 grant funding to the region. We appreciate the hard work required to develop these recommendations. In addition, we would like to clarify questions raised by reviewers and request a re-evaluation of scoring with the goal of raising the region's draft score.

Round 2 Awards Bring Balanced Funding to the North and South

The State decision to fully fund the Santa Barbara County region was made in an objective and balanced fashion. The State's thorough analysis of the Santa Barbara Countywide Proposition 50 grant application resulted in a highly competitive score for the region. However, in a broader context, the overall recommendations would provide southern California with an additional \$50 million. This sum, which includes the \$25 million granted to the San Diego region, brings the total funds granted to southern California to \$206 million. The total funds granted to Northern California are over \$244. Although the northern part of the state received substantially more total funding (\$40 million), the draft recommendations go a long way toward achieving parity.

Additional Information on Application Scoring

Santa Barbara County would like to clarify that the overall matching funds percentage provided by the region is 44%. Confusion regarding a State Revolving Fund loan to one project led State reviewers to conclude that the funding match totaled 21.4%. Information provided below supports the corrected 44% total matching amount.

In addition, the revised total monetized economic benefit for all projects is \$292,203,768 (total was \$266,646,925 in the submitted grant application). Consultation with SWRCB reviewers led to a re-evaluation of Project 15 (Lompoc Regional Wastewater Treatment Plant). The revised total monetized economic benefit to Project 15 now includes the economic benefit to agriculture of \$25.6 million over the life of the project. The Project 15 total monetized economic benefit is now 38,964,679 (total was \$13,407,836 in the submitted grant application).

Matching Funds Clarification

The State reviewers requested clarification on two items related to Funding Match:

1. Review of Project 15 (Lompoc Regional Wastewater Treatment Plant) included a note that the primary source of Funding Match is an SRF Loan. The SRF Loan funding was inadvertently included in Funding Match, and the sources of local Funding Match were not broken down in detail. The Reviewer reduced the Funding Match amount for this project by \$84 Million, which resulted in an overall Funding Match of 21.4%, and a score of 2.

The accurate Funding Match amount for this project is \$31,440,575 in 2006 dollars. The funding match comes from Vandenberg Village Community Services District (VVCSD) wastewater ratepayer revenues, a City of Lompoc 2007 Revenue Bond and Vandenberg Air Force Base (Vandenberg AFB) federal funding (see table below). These changes result in an overall Funding Match of \$61,689,572 or **44%**, which should receive a score of 3 instead of 2.

Project 15 Funding Match Source	Amount
Vandenberg Village CSD – Wastewater Ratepayer Revenues	\$ 5,043,313
City of Lompoc – February 2007 Bond	\$12,866,721
Vandenberg Air Force Base – Federal Funding	\$14,258,846
Total	\$31,440,575

Information to substantiate the revised funding match breakdown can be found in Attachments “A” through “E” to this comment letter. The information includes:

- **Attachment A - Budget Tables** Two revised budget tables from the grant application show the recalculated funding match. Those revised budget tables include the budget table for Project 15 and summary budget table. The attached tables show highlighted changes for a clarification on the local funding match for Project 15. **Payment Tables** – Lompoc Regional Wastewater Treatment Plant Upgrade Project - Local Funding Breakdown by Fiscal Year” showing payments made by Vandenberg Village CSD and Vandenberg AFB to the City of Lompoc for Project 15.
- **Attachment B** - Invoices from City of Lompoc to Vandenberg Village CSD indicating payments made and due for wastewater services.
- **Attachment C** - Vandenberg Village “Wastewater Service Agreement – Lompoc Valley Regional Wastewater Management System” (refer to page 9, item B "Future Facility Requirements" that discusses the apportionment of costs) and City of Lompoc “May 2, 1978 Revision to Agreement of June 1, 1974”.

- **Attachment D** - Contract between Vandenberg Air Force Base and the City of Lompoc for wastewater services
 - **Attachment E** - City of Lompoc “Lompoc Public Financing Authority – 2007 Revenue Bonds”
2. Review of Project 13 (Laguna County Sanitation District) shows that a source of Funding Match is through a Prop 50 Water Recycling Grant, which is not eligible for Funding Match. The Reviewer requested clarification on the source of this funding. Santa Barbara County would like to clarify that Project 13 will not be using Prop 50 Water Recycling Grant funding. A funding match for Project 13 for the same amount will come from the Laguna County Sanitation District connection fee capital reserve fund. This comment is just to follow-up on the Reviewer’s request for clarification and **no changes need to be made to the amount of the Funding Match.**

Economic Analysis Clarification

Clarification of reviewer comments and questions

1. **“The \$1500/AFY value may be appropriate when shortage costs are avoided, but may overstate benefits when existing raw water supplies are replaced (State review comment).”**

As mentioned in the Proposal text, SWP water is the only alternative source of water supply, besides desalination. Shortages during summer months would occur in all water year types due future demand levels, decreasing reservoir capacity, and a lack of feasible alternatives.

Project 1 (Cachuma Operation and Maintenance Board), 5 (City of Guadalupe), and 7 (City of Santa Maria) assess benefits based on the \$1,500/AFY value of SWP water. In Project 1 and 7 water supplies are increased through an expanded pipeline and wastewater treatment system, respectively, and stated in the project description. Only in Project 5 are existing wastewater supplies replaced. In this scenario it is stated in the project description that improved wastewater, treated at tertiary levels instead of secondary levels, would be used for landscape irrigation. Title 22 does not allow the use of secondary treated water for residential landscaping and therefore the treated water can be viewed as a new water supply. This is identified in the text because the existing system would “preclude using the treated wastewater for [this] beneficial use”. Therefore, benefits are not overstated in these scenarios.

2. **“About 55% of costs are incurred for the Vandenberg CSD Lompoc WWTP upgrade. Quantified benefits are only 12% of costs. An alternative cost approach or more quantitative estimation for reduced treatment and operations costs, or household and recreation benefits seem appropriate (State review comment).”**

Reduced treatment and operation costs are included in the analysis. “In this analysis it is assumed that initial operation costs will be reduced by \$500,000 per year. This is based on the fact that city is challenging the SWRCB molybdenum discharge standard because the natural molybdenum level is higher than the current discharge standard.” This is reflected in the capital and O&M costs.

Additional Economic Benefits from Project 15

The following identifies \$25.6 million in additional economic benefits to agriculture in the Lompoc Plain Groundwater Basin (Basin) from the upgrade to the Lompoc Regional Wastewater Reclamation Plant (LRWRP) (Project 15). The additional economic benefits bring the project total benefits to \$38,964,679 from \$13,407,836.

A discussion of the general water quality and agricultural assumptions made for the analysis is followed by a more detailed synopsis of the benefits.

Assumptions

Several assumptions were made when estimating the improved groundwater quality in the Basin:

- Approximately 90 percent of the LRWRP effluent, along with Santa Ynez River water, percolates into the Basin before entering the Pacific Ocean ("Evaluation of Water Supply", September 23, 1997, prepared by Todd Engineers).
- Average annual yield from the LRWRP totals 3,920 AF.
- Average annual flows in the Santa Ynez River below the LRWRP totals 1,421 AF.
- The Lompoc Plain groundwater basin contains 100,000 AF of usable groundwater.

Agricultural Economic Benefits

The LRWRP is a regional wastewater treatment facility operated by the City of Lompoc that receives wastewater from Lompoc, Vandenberg Village, and Vandenberg Air Force Base. The upgrade to the LRWRP would improve the quality of the average 3.2 million gallon per day of wastewater which is treated and discharged into San Miguelito Creek, a tributary to the Santa Ynez River. Approximately 90 percent of the treated wastewater percolates into the Basin, which serves as the only source of water for agricultural production in the area.

The planned upgrades will be installed within the existing LRWRP complex. The improvements will allow the plant to achieve the total dissolved solids (TDS) target of 1,100 mg/L. Reducing TDS in the wastewater that percolates into the Basin will improve the productivity of agricultural production.

Existing TDS in the Basin ranges from 700 to 2,000 TDS (County of Santa Barbara Public Works, Water Resource Division). These levels of TDS do reduce the productivity of most vegetable, row, tree, and vine crops (UC Davis Extension Publication 8066). Reducing the TDS in the LRWRP wastewater from 1,300 to 1,100 TDS, and blending with the Santa Ynez River will improve the quality of the Basin water used for agricultural crops.

Weighting each of the three water supplies, Basin groundwater, Santa Ynez River, and LRWRP, by their respective yield and TDS provides an estimate of the improved water quality levels in the Basin with the LRWRP upgrade. These improvements will continue on an annual basis throughout the life of the project as wastewater from the LRWRP continually percolates into the Basin. Yield and TDS estimates are provided in Table 1. Blending these supplies with the improved LRWRP wastewater reduces TDS by 6.17 in the first year and by 127.4 in year 50.

TABLE 1

Lompoc Groundwater Basin Annual Water Supply and Quality

Supply	AFY	TDS
LRWRP Without Upgrade	3,226	1,300
LRWRP With Upgrade	3,226	1,100
Santa Ynez River	1,279	625
Lompoc Plain Groundwater	100,000	1,350*

*Estimated average TDS

Source: County of Santa Barbara Public Works, Water Resources Division

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Agricultural production is impacted by the TDS in irrigation water pumped from the Basin. Higher levels of TDS can reduce crop yield significantly. The agricultural land between the LRWRP consists of high value crops such as artichoke, lettuce, broccoli, and flowers. The higher value crops can gross from \$10,000 to \$30,000 per acre. To estimate the agricultural impact of upgrading the LRWRP, the sensitivity of vegetable, row, vine, and tree crops was evaluated. Using UC Davis extension information for these crops a function was developed to estimate the average reduction in crop production with increasing TDS levels.

Based on the average decline in vegetable, row, tree, and vine crop production from increased TDS, reducing the Basin's TDS by 6.17 in year 1 would increase the production of agricultural operations by 0.14 percent. In year 50 a reduction of TDS by 127.4 would improve crop production by 2.90 percent. With approximately 600 acres of agriculture in the Basin, and high value crops grossing an average of \$20,000 per acre, the economic benefit of the LRWRP upgrade to agriculture would total \$25.6 million over the life of the project.

Supporting Information

Attachment F includes the following to substantiate the new agricultural benefits:

- Revised Prop 50 Round 2 grant application economic benefit tables for Project 15 (Lompoc Regional Wastewater Treatment Plant) and for the all projects,
- Todd Report Excerpt,
- UC Davis Extension Salinity Report,
- "Water Resources of Santa Barbara County" (Santa Barbara County Public Works Department), cover page, 2000,
- "Water Resources of Santa Barbara County" (Santa Barbara County Public Works Department), groundwater excerpt, 2000,
- "Water Resources of Santa Barbara County" (Santa Barbara County Public Works Department), water quality excerpt, 2000, and
- Revised table from PSP, EXHIBIT 8-O2, Project 15 - Annual Costs of Avoided Projects (2006 Dollars).

We thank you for the opportunity to provide comments on your draft recommendations. We again commend the staff of DWR and WRCB for the effort necessary to score the lengthy and complex proposals submitted. We look forward to working with WRCB to implement our projects and with DWR on further development of the area-wide IRWMP pursuant to Proposition 84.

Sincerely



Robert B. Almy, Manager
Santa Barbara County Water Agency

Cc: Tracy Billington
Santa Barbara County Area-wide IRWMP Cooperating Partners